

Dynamics of the intraurban structure of Prešov - functional intraurban structure of Prešov and brownfields.

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Abstract

The main objective of the article is to trace the dynamics of the intraurban structure of the city of Prešov with regard to post-transformation period in the first decade of the 21st century. It has been the period of intensive changes of intraurban structures in all parts of the city. The changes result from the continued interference of the effects of globalization and economic transformation. The paper presents the contemporary state of intraurban structure dynamics in the city of Prešov with regard on functional intraurban structure in the context of functional fragmentation, brownfields and their revitalization. The paper besides some theoretical framework presents and maps the current state of brownfields within the area of Prešov.

Theoretical framework

For more than twenty years the post-communist cities have undergone significant and intensive changes what can be clearly manifested in their intraurban structures. Intraurban structure as a complex unit consisting of the three partial intraurban structures, morphological, functional and social-demographic, is being constantly transformed under various factors e.g. political and social in the first half of the 1990s or political-economic factors related to transformation period as far as the year 2004, or the current changes resulting from the interference of the effect of globalization and economic conditions. One of the phenomena closely related to the above factors manifesting itself within the functional and also morphological structure of the city, is the problem of brownfields. Since the Slovak cities have been continuously transformed in the last two decades, brownfields as the negative result of change in land exploitation and function can be identified in many of them.

Brownfields, a term which first appeared in the U.S., has become a huge problem in connection with the use of land in the world. The term brownfields in relative context was for the first time mentioned in June 1992 in the premises of Congress, when the U.S. Environmental Protection Agency (U.S. EPA) identified the Cuyahoga County (Ohio, USA) as the first brownfield in history. In 1993, the agency launched an initiative to restore the economic development of brownfield sites (Brownfields Economic Redevelopment Initiative, Brownfields Initiative), which gradually got into the main national program and also managed to change the way of looking at treatment and dealing with contaminated properties in the U.S. (Vanheusden 2007, p. 559). Brownfields appeared not only in USA, but also in every industrialized country including Slovakia. The term "brownfields" or "brownfield sites" is taken from the English language, but in Slovak conditions can be encountered with the use of Slovak literal equivalent of "brown fields" (land, facilities, etc.). Under the term

brownfields we can understand the old, abandoned, underdeveloped, unused, idle, or economically underused, devastated, ravaged, ruined, dilapidated facilities, areas, land, property, buildings, complexes and so on, which lost their function and where the contamination is estimated. Brownfields arise as a remnant of the industrial, agricultural, residential, military, or other social-economic activity in completely or partly developed urbanized area. (by Kadeřábková, Piecha et al., 2009, Ferber et al.2006).

In Slovak conditions the definition of the term brownfield has not been unified so far. But in the tactical and strategic documents adopted in Slovakia, we are working with the definition in line with the assessment of European concept. The National Strategy for Regional Development describes brownfield as "abandoned, underused or empty area that may or may not have the ecological burden, where the previous use ended and the market was not able (without some kind of intervention) to give impetus to its reuse. However, with the help of PPP projects, and various other promotional activities by the state and the EU, it might be possible to prepare it for further use "(MVRRSR 2007, p. 40). The strategy is one of the priorities in the Priority Axis. 4 Competitiveness, growth and business environment as "building the business real estate with an emphasis on the use of brownfields." However, it is possible to share the view that there is the absence of clear statements in national policy determining what should become with brownfields. (Ferber 2009). Deciding what brownfield is and what is not depends too much on local circumstances. What is considered to be an underutilized brownfields from one point of view, from a different perspective, it could be considered a normally functioning business, or land use (Ferber 2009, p.10).

Theories on brownfields have been far less sophisticated so far, but the most common reasons for their occurrence, as the literature presents, are the following: the dynamic social, political and especially economic changes (transition from planned economy to market economy, stifling the state enterprise and development of ,private enterprise, transformation of ownership, privatization), the restructuring of the state, but also the regions in any country and at any time (Jackson Ferber in 2009, p.7).

In recent years, however, it can be observed how the global economic crisis contributes to the detection of extensive reef development in Slovakia. Abandoned and devastated areas in urban zones have grown into unexploited or unoccupied large, newly built office and industrial buildings with irreversible or lost public investment. It is true that unused and degraded areas should not be associated only with the wrong political decisions. Development of settlements is not only a process of growth, but primarily a natural regeneration of permanent residential structure in its functional and physical nature. A part of this process is the simultaneous existence of structures in various stages of development, including stages of degradation and subsequent recovery. The problem arises when the structures with their original function, like production, transport, housing and recreation, come to the state when degradation of the territory is so vast and deep and takes place in such unfavourable external conditions that it is not possible to start the process of natural recovery and regeneration by

their internal forces. The severity of this problem is highlighted not only by the need for outside intervention to launch the recovery phase (not only investment intervention), but primarily by the impact of degradation on the entire urban structure or areas of industrial parks built on green fields, waste landscapes with potentially negative impact leading to the decay of urban structure or even a region as a whole (URBANITY Finn in 2011, p.7).

Brownfields in Prešov

The Prešov Region is economically the weakest region in Slovakia and because of its low internal investment potential, the industry in this region is not enough developed. According to the Annual Report of SARIO (Slovak Investment and Trade Development Agency) in 2011, the agency's database records 68 brownfield areas, which together with 55 greenfield premises and three offices provide potential investors with 126 properties in Prešov Region (SARIO 2011). Only 59% of them can be used immediately, while the remaining areas are struggling with the difficult problem of property relations. The database is not publicly available and information about the areas is being offered to specific investors on request. According to the document Amendments to Land Use Plan for the Prešov Region in 2009, among the most important functional areas of manufacturing and industry we can find the following brownfields: Chemes in Humenné, the area Za traťou in Lipany, and a brownfield in the city of Snina.

Industry in Prešov is concentrated in three more compact industrial zones - south western industrial zone (Budovateľská-Jilemnického Streets), southern industrial zone (with industrial areas developed along Východná - Košická - Petrovianska – and Jesenná Streets) and north-eastern industrial area (with compact buildings on cadastral areas of Prešov - Širpo and community of Lobotice - Šarišské Lúky). Smaller industrial sites are scattered outside the mentioned areas (by ÚPN-M Prešov 2011). The city of Prešov finished a standard industrial park on a greenfield - Záborské Industrial Park, which is currently the only 100% prepared, after final inspection, green park in Prešov. The park houses logistics companies - IM Logistic Ltd., DSL plus Ltd., and company IPZ Prešov, Inc., which is the management company of the Industrial Park Záborské. The investors focus on light engineering, logistics, plastic products, solar panels, electronics, and waste heat management, wood processing industry. (PREŠOV 2012). Other proposed industrial parks are Grófske Industrial Park (cadastral area of Nižná Šebastová and partly in the cadastral area of Kapušany) and Zátúrecká IP (cadastral area of Haniska).

The economic focus of the city and the surrounding micro-region can be characterized as of industrial-agricultural. Nevertheless, the city of Prešov is the centre of business with more than 1500 company headquarters and about 6,000 individuals who trade as freelancers. Sectoral structure of the business environment in Prešov is greatly diversified. The most important field is engineering (ESPINEA, Ltd.), electronics and clothing (Gemor Fashion Ltd., OZKN s.c.). There is also a wood-

processing industry represented by two great companies, and the traditional printing industry. Rather extensive is the food industry, which includes 7 large companies in Prešov.

As Ferber (2009) writes, in Prešov it is possible to identify several smaller areas of brownfield sites that fall mainly in the category of industrial brownfields. Unique in Slovakia was the company Solivary S.C. as the only factory on the extraction and processing of salt in Slovakia. After the end of production in 2009 the area of the plant became idle, but since 2011 it has a new owner, who started with the revitalization and redevelopment of some objects (evaporation station from 1992). There has been a change in the land use plan for the area of Solivary from its industrial to commercial, relax and residential function, but with the maintenance of nine original objects that present national cultural heritage (built in 1925).



Photo: Solivary brownfield. Source: www.website24.sk

After closing several large engineering and metalworking companies in Prešov (ZPA Křížik S.C., VAP Prešov), there remained relatively large unused areas. At present, most properties are rented or sold. After closing ZVL AUTO Company, specialized in the production of anti-friction bearings and bearing rings, according to SARIO, there has been recently prepared a hall for investment with an area of 8000 m².

Besides the industrial brownfields, there are also areas of other categories in the city of Prešov. These include cultural and recreational brownfields. The complex intended (by SARIO) as a recreational brownfield, was the Municipal Sports Hall in Prešov. However, in 2010 the city of Prešov

signed a leasehold contract with the handball club, TATRAN Prešov, Ltd. for 25 years. In the contract the club agreed to invest in the leased premises. In 2011 the interior was reconstructed and today the exterior of the city hall is being renovated (TATRAN Prešov 2010).

The amphitheatre in Prešov in the area called Pod Táborom was registered by SARIO as brownfield. The area was unused for 10 years, but the city managed to clean it up and in the summer of 2012 a number of cultural events were held there. Another recreational brownfield in Prešov includes the former park on Masaryková Street, south from the city centre. The current owner had closed the area, and for more than ten years it has been decaying and overgrowing without any chance for further use, because of the conflicts between the owner and the city that is interested to buy the area.

A special case of brownfield in Prešov is also a property on Antona Prídavka Street in the Sídliisko III housing estate. It is a building under construction since 1980, but never finished and unused, where the dental centre should have been located. So far this has not happened and the area is still overgrowing green.

Areas of agricultural production have a specific position in the city. Among the built up areas and in the city outskirts there can be found several following sites of former intensive crop production, for example the areas of former greenhouse cultivation on Košická Street. Many areas of agricultural production are according to the current Land Use Plan reduced by the areas for individual housing construction, particularly the localities Kráľova hora, Vydumanec, Pod Skalkou, Šalgovík and other. Intensification of agricultural production is not planned within the land Use Plan and the areas of livestock production are left to accomplish. Agricultural land in the administrative area of the city can be used for agricultural crop production in such extent that would not come into conflict with the surrounding functions in the landscape (ÚPN-M Prešov 2011).

The problem of brownfields and their revitalisation is rather complicated, lying at the intersection of interrelated spheres. Brownfields might be observed from various points of view - economic, financial, environmental, political, historical, technical, social, cultural and especially in terms of sustainable development of the country. Therefore, it is necessary to put it in a broader framework, to regional policy (Kadeřábková, Piecha et al. 2009).

As Kadeřábková and Piecha (2009) write, at present there is no single strategy on national or regional level to formulate exactly how to tackle with brownfields. Nevertheless, the revitalization of brownfields is necessary, particularly in relation to the frequent absence, or inconsistent compliance with regulatory instruments to prevent uncoordinated urban sprawl into the countryside by construction of the so-called. "greenfields". This construction, in many cases, is promoting the interests of individual investors (Kadeřábková, Piecha et al., 2009).

Database of available real estate and industrial parks in Slovakia was processed by the contributory organization of the Ministry of Economy - Slovak Investment and Trade Development Agency (SARIO). The database contains only quality and interesting areas suitable for potential

investors, since "brownfields reuse in Slovakia is now limited only to those areas, where the value after deduction of all costs associated with the project and after deduction of reasonable profit proportional to the risk taken by the investor, is still positive "(Petríková, in URBANITY 2011, p. 10).

Conclusion

In the paper we tried to outline some theoretical framework concerning brownfields and their revitalisation in relation to intraurban structure of the city. As it is a process that primarily impacts the functional, and is being reflected in morphological intraurban structure of the city, it can be applied as one of the measurement tools or indicators for the intraurban structure dynamics. As it was described in the second part of the article, in the region of Prešov we can identify several brownfields from various categories. The greatest group includes industrial brownfields, mostly identified in Prešov industrial zones. Other, smaller in number, include cultural, recreational and agricultural brownfields. Now, the areas are on a different stage of their transformation, but functional fragmentation and urban fallow are the most frequent form of their current state. Nevertheless, the processes are rather slow and constrained by limiting conditions. They are quite well notable in the intraurban structure of the city. On one hand, we can observe significant change in function of the studied areas – for example the shift from industrial function to commercial, or the functional fragmentation of the original function to various smaller operations, or in some cases, the loss of the function at all (urban fallow). On the other hand, there are visible transformations in the appearance (degrading or revitalizing) and morphology (sprawl, demolition, change of ground plan, size) of the original areas. They change in qualitative and quantitative way. The process of brownfields' revitalization, however, is not that requisite as it should be in the region of Prešov. The problem is mostly in the lack of tools, strategies, and databases dealing with brownfields, especially on regional and local level what would facilitate the investors' opportunities for their revitalization and reuse.

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